

THE CLAIMS

1. A carrier structure for a reflector element, for use in a solar energy reflector system, and which comprises:
 - 5 a platform which is arranged to carry the reflector element and which is formed with stiffening elements,
 - a frame structure supporting the platform, and
 - mounting means supporting the frame structure in a manner that accommodates turning of the carrier structure about an axis of
 - 10 rotation that lies substantially coincident with a longitudinal axis of the reflector element when mounted to the platform.
2. The carrier structure as claimed in claim 1 wherein the platform comprises a corrugated metal panel, with the corrugations forming the
- 15 stiffening elements, and wherein the reflector element is supported upon the crests of the corrugations.
3. The carrier structure as claimed in claim 1 wherein the platform comprises a panel-like platform, wherein the stiffening elements are
- 20 formed as flutes in the platform and wherein the reflector element is supported upon crests of the flutes.
4. The carrier structure as claimed in claim 2 or claim 3 wherein the stiffening elements are orientated to extend in a direction parallel to
- 25 the axis of rotation.
5. The carrier structure as claimed in any one of the preceding claims wherein the platform is curved concavely in a direction orthogonal to the axis of rotation.
- 30 6. The carrier structure as claimed in claim 5 wherein the platform is curved with a radius of curvature within the range of 20 to 50 metres.
- 35 7. The carrier structure as claimed in claim 5 or claim 6 wherein the reflector element is secured to the platform in a manner such that the curvature of the platform is imparted to the reflector element.

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8. The carrier structure as claimed in any one of the preceding claims wherein the reflector element is mounted to the platform and comprises a panel-shaped glass mirror.
- 5 9. The carrier structure as claimed in any one of claims 1 to 7 wherein the reflector element is mounted to the platform and comprises a plurality of edge-abutting glass mirrors.
- 10 10. The carrier structure as claimed in any one of claims 7 to 9 wherein the reflector element is adhered to the platform.
11. The carrier structure as claimed in any one of the preceding claims wherein the frame structure comprises hoop-like end members that extend about the axis of rotation of the carrier structure and
15 wherein the platform extends in the longitudinal direction between the end members.
12. The carrier structure as claimed in claim 11 wherein the end
20 members are supported for turning upon the mounting means.
13. The carrier structure as claimed in claim 11 or claim 12 wherein each said hoop-shaped end member has a channel-section circumferential portion and a diametrically extending member that is
25 constituted by a transverse frame member of the platform.
14. The carrier structure as claimed in claim 13 wherein the mounting means comprise spaced-apart supporting rollers which track within the circumferential portion of associated ones of the end
30 members.
15. The carrier structure as claimed in any one of claims 11 to 14 and further comprising a drive system for imparting unidirectional turning drive to the carrier structure by way of at least one of the end
35 members.
16. The carrier structure as claimed in claim 15 wherein the drive

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system comprises:

- a) a link chain that extends around and is fixed to the end member to form, in effect, a gear wheel,
- b) an electric motor and
- 5 c) a sprocket for transferring drive from the motor to the link chain.

17. A carrier structure substantially as shown in the accompanying drawings and substantially as hereinbefore described with reference
10 thereto.